

5-1-2005

BS News

Follow this and additional works at: <https://arrow.tudublin.ie/bsn>



Part of the [Civil Engineering Commons](#), [Construction Engineering Commons](#), and the [Construction Engineering and Management Commons](#)

Recommended Citation

(2005) "BS News," *Building Services News*: Vol. 44: Iss. 5, Article 1.

Available at: <https://arrow.tudublin.ie/bsn/vol44/iss5/1>

This Article is brought to you for free and open access by the Journals at ARROW@TU Dublin. It has been accepted for inclusion in Building Services News by an authorized administrator of ARROW@TU Dublin. For more information, please contact yvonne.desmond@tudublin.ie, arrow.admin@tudublin.ie, brian.widdis@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 3.0 License](#)

BSN News

et al.: BS News

MECHANICAL & ELECTRICAL BUILDING SERVICES

MAY 2005

Wake Up!

The Alarm Bells Won't
Get Any Louder!

Also

Building Management Systems
Another Side Off ...

CIBSE News



Cylon making change easy



Cylon's flexible control solution minimises the costs of design changes even at a late stage in commissioning. Client's needs change, plant equipment is updated, but with Cylon the same control solution can fit your project requirements. Cylon UnitronUC32 range of controls are unique in their level of adaptability, with UniPUTS™ as standard and a common software framework throughout the range.

For the versatile Cylon specification please contact us today on (01) 245 0500 or info@cylon.com
www.cylon.com

CYLON

BSNews

MECHANICAL & ELECTRICAL
BUILDING SERVICES

ISSN 0791-0878

Published by:

Pressline Ltd,
Carraig Court,
George's Avenue,
Blackrock, Co Dublin.

Tel: 01 - 288 5001/2/3 Fax: 01 - 288 6966

ISDN: 01 - 211 2338/9

email: bsnews@pressline.ie

Website: www.buildingservicesnews.com

Editor: Pat Lehané

Advertisement Director: Joe Warren

General Manager: Louise Byrne

Origination and Design:

Pressline Ltd. Tel: 01 - 288 5001

Subscription: One Year — €65

Printed by: Ebrook.

© All editorial contents and all
advertisements prepared by the publishers,
Pressline Ltd.

READERSHIP DATA

BSNews (formerly Irish Building Services News) is Ireland's only dedicated Building Services magazine providing coverage of heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing, maintenance, energy and environmental industries. It is the only publication catering exclusively for these industries and its circulation includes members of the following:-

Chartered Institution of Building Services Engineers (CIBSE); The Mechanical Engineering & Building Services Contractors' Association (MEBSCA); The Association of Consulting Engineers of Ireland (ACEI); The Mechanical Engineering Contractors' Association; The Institute of Domestic Heating Engineers (IDHE); The Institute of Plumbing; The Register of Environmental & Gas Installers of Ireland (REGII); The Irish Home Builders Association (IHBA); Builders Merchants/Trade Supply Outlets; Irish Property & Facilities Managers Association.

In addition, BSNews circulates to independent building services contractors and key executives in industry. Government, Semi-State and local authority bodies. Essentially, our circulation is virtually saturation coverage of all those with an interest and/or involvement in the building services industry.

McGrattan Engineering — Alarm Bells Still Ringing!

The draft directors' estimated Statement of Affairs (as at (29/4/'05) relating to McGrattan Engineering Ltd shows an overall deficiency of just over €1 million. However, the final deficit looks like being more because of a number of mitigating factors.

For one thing, the €1.34 million debt due to unsecured creditors seems understated given that many of those represented at the meeting queried the amounts shown, while others claimed they were not included at all.

Moreover, the sum of €285,341 presented as available for distribution to the said unsecured creditors was also understated. This figure included stock with a net value of €150,000 which in turn was estimated to realise €115,000.

However, in a bizarre twist it emerged that the stock in question had been stolen from where it was stored in Ashbourne and so was no longer available!

An alternative liquidator to that of the company's nominee was proposed by a major creditor but, as the majority of proxy forms favoured the company's nominee, he was appointed.

Not that it really matters. Unfortunately, who acts as liquidator is unlikely to improve the lot of unsecured creditors. The indications are that there will be precious little left for distribution once the liquidation process, including costs relating to same, is concluded.

In a capitalist, free market situation such as ours, companies will undoubtedly fail, for a whole variety of reasons. However, given the relatively small scale of the building services sector in Ireland, communication and cooperation among all the players involved could help (a) minimise the number of failures and (b) reduce the losses suffered by those affected.

All that's transpired in recent months also confirms that price-led tendering procedures which do not take account of the intrinsic value of the products and services being provided simply cannot be sustained.

I N T H I S I S S U E

Trade News & Product Information	2
Grundfos New Europump Energy Labelling Scheme	13
Building Management Systems	14
Another Side Off ... Ciaran King Rides Out ... for 160km!	25
CIBSE News — AGM	26
Plumb Lines	28

Flygt Ireland Goes Underground

Flygt Ireland has secured a €100,000 order for the Dublin Port Tunnel project to supply, install and commission two dual CP3127 drainage pumping stations, together with two DP3045 oil skimmer and pumps and two dual DP3045 seepage pumping stations.

Located at the mid-section area of the tunnel length, these areas are classified as hazardous zone one. The installation also comprises two large stainless steel "Form 4" control panels incorporating all the associated electrics and

controls, together with tunnel ventilation sections. Pipework, valves, ultrasonics and electrodes are also included and, although the contract value is currently €100,000, additional equipment and upgrades in the specification will increase this by another €15,000.

The Port Tunnel runs from the M1 at Santry in Dublin to link with Dublin Port. The 5.6 km project is being constructed as a dual carriageway motorway with 4.5 km in tunnel and is due for completion at the end of this year.

Woodleigh Get Ability

Woodleigh Ventilation has formed a new trading liaison with Ability Fan Coil Units of Dorset in the UK. Ability was established by Peter Lowther and colleagues in 2001 after they left Quartz to establish their own design and manufacturing service. Today turnover has grown to €4 million per annum which equates to approximately 14,000 airside and waterside units per year.

Ability resources now at Woodleigh's disposal include technical expertise, vast experience of fan coil applications, and an ability to configure workable, effective fan coil packages.

Contact: Dan Chambers, Woodleigh Ventilation.
Tel: 01- 830 3311; email: woodleighventilation@eircom.net

York Energy Solutions

York International has extended the scope of its service operation by establishing York Energy Solutions, a specialist team providing energy and cost saving opportunities for clients throughout Ireland. By assisting them to reduce their energy use in buildings and processes, the new operation will take responsibility for

reducing energy consumption on behalf of clients, allowing them to concentrate on core business.

Recognising that not all organisations have sufficient need to employ a dedicated energy management team and that some companies may simply require an occasional extra resource, York Energy Solutions



Kieran Coleman, Director of AquaChem Ltd with Malcolm Edwards, Sales Director of Feedwater Ltd

Feedwater Ltd, one of the UK's largest independent water treatment specialists, has signed an exclusive distributor agreement for Ireland with AquaChem Ltd of Dunboyne, County Meath.

Under the agreement AquaChem will have access to a broad range of products including Feedwater's patented specialist water treatments. Feedwater has also assigned technical and sales support personnel and provided expanded training support at AquaChem's training

facility in Dunboyne.

Kieran Coleman, Director of AquaChem, adds: "This is an exciting development for AquaChem. Feedwater is one of the few remaining UK companies that has both chemical and microbiological laboratories. This means we can improve significantly the range of services that we offer to our customers by being able to source chemicals, equipment and laboratory services from the one supplier."

Contact: Cieran Coleman, AquaChem.

can fill the gap or work with the client's established team.

"The cost of energy is high and continues to rise. Our clients have indicated that energy reviews — either on an *ad hoc* basis or regularly included within their maintenance contract — would be a valuable extension to the York service," said Andrew McEvitt of York ACR in Dublin.

The main focus of York Energy Solutions is

on refrigeration and air conditioning equipment, with associated pumps, fans and controls. The service can be tailored for clients wishing to save energy across the whole of their site services, and can include energy auditing, training, project implementation, project management and continuing client support.

Contact: Andrew McEvitt, York ACR.
Tel: 01 - 466 0177;
email: yorkdublin@ie.york.com

The commercial answer

SANYO

AIR CONDITIONERS

SPW R410A DC Inverters: 3HP, 4HP and 5HP



By combining the latest DC inverter technology and the energy efficient R410A refrigerant, the award winning SANYO SPW DC Inverter heat pump range provides new levels of performance and efficiency to the UK and Irish markets.

Specifically designed for commercial and retail applications, the ingenious design of the systems not only overcome the limitations associated with traditional split systems but also offers the end user both improved comfort and drastically reduced power consumption.

- 7.1kW to 12.5kW nominal cooling capacity
- Single fan 4HP outdoor unit (only 780mm high)
- Single phase power supply
- 1 amp start current
- 6 indoor model sizes
- Unique twin, triple and quad options
- Lower running costs

Simple to install and maintain the SPW R410A DC Inverter Range also qualifies for the Enhanced Capital Allowance Scheme.
SANYO - a good decision all round.



Honeywell Air Cleaners

There is more to air treatment than air conditioning and ventilation, according to Honeywell, whose air cleaners actively remove pollutants and supply the clean air over large areas. This is unlike some ventilators which only move air, and those air conditioners which only cool air and adjust humidity.

Modern building standards ensure very little air and heat is lost outdoors during winter months so airborne pollutants build up where there is insufficient filtration or ventilation. Pollution levels indoors in urban areas can often reach as high as four or five times those measured outdoors, yet Honeywell's air cleaners can make indoor air much cleaner and healthier than outdoors.

Honeywell electrostatic air cleaners work in two ways. First, larger particles are trapped by a mesh filter while the tiny particles remaining receive an electrostatic charge and are attracted onto aluminium plates, like iron filings onto a magnet.

Honeywell air cleaners are available in various sizes and designs to suit the room size, layout and decor, in surface-mounted, recessed and even portable types that can be wheeled from room to room. All have high-efficiency fans and are designed to provide an effective air distribution pattern while minimising draughts and energy consumption.

Contact: Honeywell Control Systems.
Tel: 0044 1344 656 000.



Air indoors can be cleaner and healthier than outside air with Honeywell air cleaners. They actively remove pollutants such as dust, smoke, allergens and viruses — unlike air conditioners and ventilators.

Varmings Does ACEI Awards Double!



Jimmy Sheehan, President, ACEI with John Purcell, Varmings

Varmings has become the first engineering design company to win both Association of Consultancy Engineers of Ireland (ACEI) Awards in the one year by taking the the 2005 Innovation in Design Award for the Galway-Mayo Institute of Technology (GMIT) Library, and the 2005 Excellence in Design Award for the new Galway Clinic.

The GMIT Library project was judged to be outstanding because of the effective combination of dynamic thermal computer modelling to simulate the performance of the building in use; the deployment of sophisticated information-gathering devices to monitor changes in the internal and external climates; and the application of simple design solutions to use the information gathered to create comfortable environmental conditions within the naturally-ventilated library spaces.

The second award for Excellence in Design recognised the creative design approach used by Varmings to integrate the

extensive engineering services installations in Galway Clinic with the architecture of the building to "produce a space of such pleasing visual impact".

The merging of the engineering services with the building finishes required intensive co-ordination and cooperation between the design team and the contractors, working closely with the client. This is evident in the flawless finish of the final construction. The engineering installations were judged to be unobtrusive without impacting on their capability to service the medical activities and to maintain energy efficient environmental conditions.

Over the last 60 years Varmings has won many awards, notably the recent winning (in conjunction with the architect) of the 2004 Sustainable Energy Ireland Energy Award for Excellence in Design Specification of Building Services for the John Hume Building in NUI Maynooth.

Dornan Engineering Appoints New Directors



Brian Acheson, Managing Director with Chris McGovern, Director; Oliver Lonergan, Director, and Liam Flynn, Director, Dornan Engineering Ltd

Dornan Engineering Ltd has appointed Oliver Lonergan, Liam Flynn and Chris McGovern as Directors of the company. Oliver will be leading the Electrical and Instrumentation Division, Liam the Mechanical Division, and Chris McGovern will be responsible for all commercial aspects within

the company.

Dornan Engineering, one of Ireland's top mechanical and electrical contractors, is part of the Kentech Group which currently operates in over 10 countries throughout the world and employs over 1000 people.

Contact: Dornan Engineering.
Tel: 021 - 497 6513.

Dun Laoghaire Baths €140 Million Proposal

Dun Laoghaire-Rathdown County Council has proposed that the local authority should undertake a €140 million redevelopment of the Dun Laoghaire Baths site. The scheme was developed by a team of in-house architects, planners and parks personnel and would make the area a destination for locals and visitors alike.

The core of the proposal is an international-standard waterworld and indoor leisure complex which includes a 25-metre pool and extensive leisure and sports facilities; new civic plazas, suitable for ice-skating in winter and outdoor concerts in

summer; the existing inaccessible foreshore between the derelict baths site and the East pier would be transformed into a new public Maritime Garden, as large as the nearby People's Park; and a new 400m coastal promenade which could continue uninterrupted between Sandycove and the East Pier.

The new amenities will be sheltered from the prevailing north/east aspect of the site by 180 apartments, shops and restaurants, underground parking, and a 10-storey elegant glass tower "lighthouse" at the Sandycove end of the site, with a public viewing area at the top.

Right in the Comfort Zone

Getting a multi-split system right means getting all the component parts working together - so that the relationship between an indoor unit and outdoor unit realises the full potential of both.

And in our Wall Mounted indoor units and Multi M and Multi FDX systems, as with all the indoor and outdoor units available in all of our multi-split systems, we have achieved the perfect balance between the two.

Exceptional performance

Our range of Wall Mounted indoor units is designed to deliver the maximum levels of comfort and energy efficiency, while blending in discreetly with their surroundings.

To this end, they pack in an outstanding array of features, such as our unique NEO Plasma Air Purifying System, with its 12-level bio-enzyme filters, capable of removing fine dust, moulds and cigarette smoke, and also capable of destroying bacteria's cell walls, giving these units an incredibly high level of performance.

Refreshingly simple

In developing the Multi M multi-split system, we reflected the simplicity of its function in its design, installation and operation. For example, it operates

using a single phase power supply. That's not to say that it isn't sophisticated. It takes advantage of multi compressor, single phase outdoor units and heat pump technology, and allies them to some of the most attractive indoor units on the market, to complete the attraction of Multi M.

Incredibly flexible

Multi F, with its single phase power supply and inverter technology, is ideally suited to applications of up to 9.0kW, whereas Multi FDX, with its use of distributor boxes, offers fantastic application potential in situations requiring up to 16.0kW, by allowing several indoor units to be run from one outdoor unit. And, being a multi-split, mini-VRF system, Multi FDX offers all the benefits of this technology, but on a smaller scale than normally associated with VRF.

The right choice, though, isn't all we have to offer.

We want everybody to feel comfortable with LG Air Conditioning: contractors, specifiers, property managers and, ultimately, end users.

Which is why, over the coming months, we will not only be launching new products, but also introducing several initiatives to ensure that everybody who works with LG air conditioning - equipment and services - feels the benefit.



Whoever you are,
welcome to the Comfort Zone...

WALL MOUNTED **MULTI M** **MULTI F/FDX**

Core Air Conditioning Ltd

Tel: 01 - 409 8912

email: info@coreac.com

LIFE'S GOOD



LG

Air Conditioning

www.lgaircon.co.uk



Since the introduction of a direct service to the Irish market in 2002 Sanyo Airconditioners have been successful in securing a significant share of VRF projects within this growing market.

A testimony to the success of Sanyo, and its appointed network of professional and experienced representatives, can be seen in such projects as the Cherrywood development.

These new offices, home to one of the world's largest IT specialists, comprise a four-storey, 120,000 sq ft building which accommodates approximately 500 staff. The indoor environment for today's and future needs is delivered by the Sanyo ECO range which ensures premium-quality

air, optimum energy efficiency, and reliable performance.

Crystal Air, one of Sanyo's leading distributors, worked very closely with the design management team and Sanyo personnel to devise the most appropriate solution for the project's needs. Drawing from their combined experiences of large and complex installations, a system was presented which utilises the latest R410a refrigerant and technology, while harmonising with the client's corporate stance on environmental responsibility.

The final solution comprised a total of 1560kw cooling capacity via 212 SPW-UR concealed ducted indoor units with 42 rooftop ECOi outdoor condensing

units. Crystal Air's solution also limited the supply air temperature to a minimum of 12C, therefore ensuring that cold draughts that can be inherent with other VRF systems are completely avoided.

Domnick Ward of Crystal Air explains: "When we put the scheme together we were very clear in what we wanted to provide ... an effective and controllable air conditioning solution for a 21st century office environment. The Sanyo ECO range offers the

flexibility and energy-efficiency demanded by such a large company.

"Specifying Sanyo on this project gave our customer the added peace of mind that comes with dealing with a world-leading manufacturer, backed by the support of our dedicated installation and service team", he concluded.

Contact: Barry Hennessy, National Sales Manager, Sanyo Airconditioners Ireland
Tel: 01 - 403 9900;
email: aircon@sanyo.ie

RACGS At Carlow

Overall winner David McDonald lived up to his 3-handicap and played some seriously good golf to take the first prize at the RACGS outing in Carlow Golf Club recently. This is a classic, old-fashioned, championship golf course which can be demanding but enjoyable, and so it proved on the day. That said, a number of others also rose to the challenge and returned some fine scores on what was a very nice day weather wise. Paddy Smee of Kilkenny Cooling was the sponsor.

Full details of all winners are as follows:—

Overall Winner David McDonald 38pts.

Class 1

Winner Liam Hctor 35pts;
Second Ger Darcy 34pts.

Class 2

Winner David Kirwan 37pts;
Second Michael McLoughlin 35pts.

Class 3

Winner Tommy McDonald 37pts;
Second David Killelea 30pts.

Visitors

Winner S Dunne 38pts;
Second Fergus Phelan 28pts.

Front Nine

Winner Billy Queally 18pts.

Back Nine

Winner Paddy Smee 18pts.



Energy Performance of Buildings Directive (EPBD)

The impending Energy Performance of Buildings Directive (EPBD) must be transposed into national law and be generally brought into operation by EU member states by 4 January 2006. However, provision is made to allow a longer period, ending in January 2009, for full implementation of more complex requirements relating to energy rating certificates.

The EU Directive on the Energy Performance of Buildings contains a range of provisions aimed at improving energy performance in residential and non-residential buildings, both new-build and existing.

In essence, the Directive obliges specific

forms of information and advice to be provided to building purchasers, tenants and users. The intention is that this information and advice will help consumers to make informed decisions leading to practical actions to improve energy performance. For householders, such actions will include energy efficient home improvements and better energy management practices.

The provision eliciting most interest is probably that relating to an energy rating certificate (effectively an energy label) at the point of sale or rental of a building, or on completion of a new building. The certificate is

to be accompanied by recommendations for cost-effective improvements to energy performance. However, there will be no legal obligation on vendors or prospective purchasers to carry out the recommended improvements.

For Ireland, a Draft Action Plan has been prepared by an Inter-Departmental Working Group, comprising senior officials of the Department of the Environment, Heritage and Local Government (DEHLG), Department of Communications, Marine and Natural Resources (DCMNR), and Sustainable Energy Ireland (SEI), with SEI providing the Secretariat.

This sets out the proposed tasks, responsibilities and timescales for implementing the Directive in Ireland and

was published earlier this month as a document for public consultation at a SEBNet meeting held in the Gresham Hotel in Dublin. Apart from various presentations, even more information was gleaned — and questions and issues raised — during the extensive Q&A sessions which followed each paper.

This Directive has implications for the entire construction industry and impacts significantly on the building services sector. It is imperative that all involved in the business study the contents carefully and avail of the opportunity to make a submission and comment on the contents.

Copies of the Draft Action Plan, a short briefing on the Directive, and the full text of the Directive, can be accessed via [www: epbd@sei.ie](http://www.epbd@sei.ie)



calpeda

CREATIVE TECHNOLOGY



OVER 1000 TYPES OF PUMPS AVAILABLE FOR ALL APPLICATIONS

SALES, SERVICE, INSTALLATION & DESIGN

ESTATE HOUSE, DUNSHAUGHLIN, CO MEATH

(01) 825 8212

Fax: 01 - 825 8215

Web: www.calpedaireland.com

Email: sales@calpedaireland.com

Versatile & Runtal Zehnder Join Forces



Versatile Directors — Catherine Treacy with Andrew Treacy and Bill Treacy

As we went to press Versatile Group announced a dramatic development within the heating sector when it revealed details of its new partnership agreement with Runtal Zehnder to distribute the

entire range throughout the 32 counties of Ireland.

"This is a very significant development for both companies", says Andrew Treacy, Managing Director, Versatile Agencies. "Runtal is a

long-established brand on the Irish marketplace, renowned for the quality and styling of its vertical and column steel panel radiators. It has a very strong market presence but one which can be greatly enhanced and expanded.

"The new partnership agreement with Versatile is intended to achieve that objective. We will bring the benefits of our considerable strengths to bear on the Runtal brand by providing all pricing and technical support from our Navan headquarters; by carrying extensive stocks; and by providing a nationwide, ex-stock, delivery service. To that end we have established a dedicated Runtal Support Team in-

house and acquired a new 50,000 sq ft warehouse facility immediately adjacent to our existing Navan premises.

"Apart from Runtal radiators, we will also carry the full range of Zehnder heating and cooling ceiling panels. This is a specialised market segment which requires a complementary mix of strong design and technical expertise, with high-performing products. Runtal Zehnder and Versatile represent that mix.

"This is a very exciting development for us and one which we are confident will see the business of our trading partners grow considerably over the coming months".

Service Tool Advance for Toshiba

Toshiba has introduced a sophisticated electronic service tool for Toshiba installers to assist them with commissioning and diagnostic routines carried out as part of a regular planned maintenance programme.

Called Dyna-Doctor, the Toshiba-patented tool is specifically designed for use with Toshiba R410A installations. Up to 66 service functions can be checked using this convenient hand-held device with the results displayed on screen or printed out to produce customer reports.

Readings are very accurate and can cut site visit time in many cases.

"Our installers have always differentiated themselves from other engineers because of the quality of the training they undergo, and their commitment to customer care", says Derek Phelan, Sales & Marketing Director, GT Phelan, the



Toshiba's Dyna-Doctor is designed for use with Toshiba R410A VRF installations.

Toshiba distributors in Ireland.

"It is something we demand assurance on when accrediting them and, in respect of Dyna-Doctor, we will be providing full training so that this new innovation will distinguish them further."

Contact: Derek Phelan, GT Phelan.

Tel: 01 - 286 4377;

email:

gtphelelan@eircom.net

BTU At Portmarnock

The first BTU outing for the the current season was sponsored by Ideal Standard with an excellent turnout of 59 participants braving the difficult weather conditions to turn in some excellent scores. However, Tony O'Reilly celebrated a triple first on the day — he is a new member, it was his first outing, and he emerged overall winner on the day. Well done Tony.

Full details of the other prizewinners are as follows:—

Overall	Tony Reilly	42pts.
----------------	-------------	--------

Class 1	0-12	
1st	Des Prendergast	37 pts
2nd	Ger Hutchinson	34 pts
3rd	Graham Fay	33 pts.

Class 2	13-16	
1st	Kieran Ryan	41 pts;
2nd	Sean Stenson	34 pts;
3rd	David Lynch	31 pts.

Class 3	17+	
1st	Des Haughton	38 pts;
2nd	Brian Kearney	34 pts;
3rd	Ray Murphy	33 pts.

Front Nine		
1st	George Carlton	19 pts.

Back Nine		
1st	Michael Matthew	18 pts.

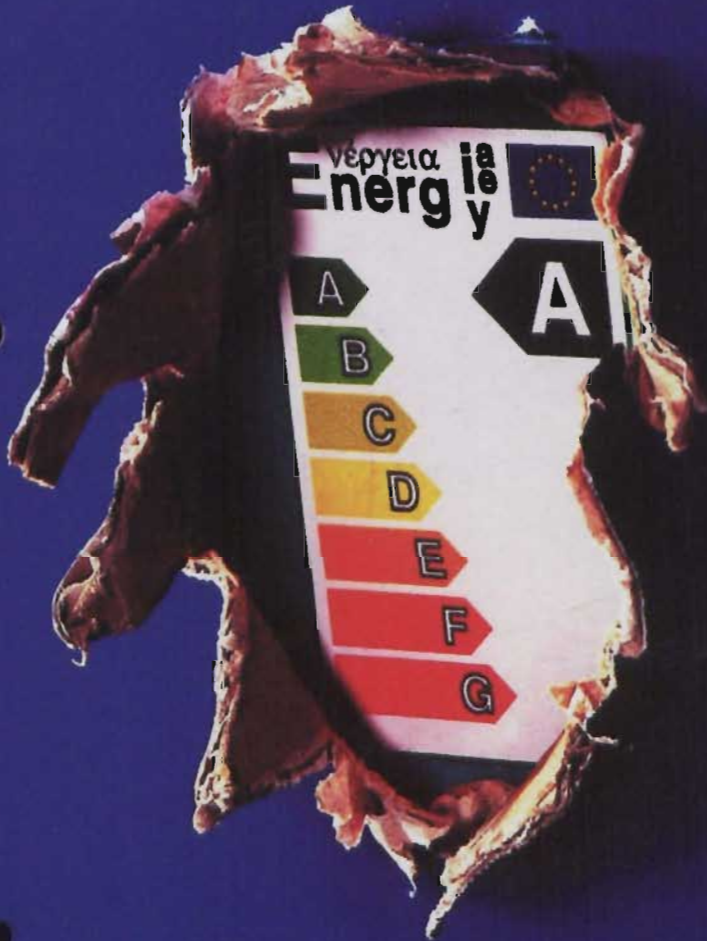
Visitor		
1st	Paul Philips	39 pts;
2nd	Paul Kelly	36 pts.

WWW.GRUNDFOS.COM

GRUNDFOS®



GRUNDFOS



The energy-labelling scale will be the pump industry's tool in illustrating how energy-efficient pumps are in the near future. Its ease-of-use and familiarity from other industries' utilisation make it an ideal system that is simple to incorporate into the world of pumps. The letters A through G allow for comparison to other pumps: A marks a very energy-efficient pump while a G-rated pump would have poor energy-saving capabilities. D-rated pumps spend an average amount of energy. Making use of this scale when considering which pump to buy will help give the consumer all the energy information needed.



Hazardous Area Air & Smoke Extraction

The Dynair FC and FCV ATEX fan series from Irish Fan Distributors are designed to comply with the European ATEX Directive 94/9/CE and are therefore certified to operate in dangerous areas where explosive atmospheres may occur.

An explosive atmosphere is the result of a mixture of air and combustible gases, vapours, fumes or dusts, under atmospheric conditions where combustion expands itself (explosion) after ignition.

These conditions may be found in painting rooms, power plants, generating systems, wood industry, cereal silos, foodstuff industry, chemical plants and many more.

FC & FCV ATEX are roof mounted fans, with a centrifugal backward curved wheel in galvanised steel sheet that



The Dynair FC (left) and FCV (right) ATEX fan series are roof mounted fans, with a centrifugal backward curved wheel in galvanised steel sheet that can grant high efficiency, low noise level and high resistance to atmospheric agents. They are available from Irish Fan Distributors.

can grant high efficiency, low noise level and high resistance to atmospheric agents. The base frame in aluminium grants a spark-proof construction in every condition.

The motor used are all IP 55 as standard, Eex-d IIB T3 in the standard version, with possibility to improve the protection degree, temperature class and enclosure group on customer demand.

These fans are designed for direct or ducted ventilation in industrial, commercial and



residential buildings, with easy installation and maintenance.

They can exhaust clean or slightly dust air with max temperature of the fluid up to 80°C (FC) or 60°C (FCV). The motor is outside the air flow. For horizontal discharge (FC) or vertical discharge (FCV).

The same innovative technology and design expertise is evident in the Dynair FC-HT series.

These fans are designed for the evacuation of high-temperature smokes and,

as such, are ideal for emergency exhausting in cases of fire. Exhausting the hot smoke when fire occurs prevents the diffusion of toxic fumes, helps prevent the diffusion in other rooms and, in keeping the temperature relatively low, helps avoid or at least delay the collapse of the structures.

The FC-HT series has been tested at Warrington Fire Research Laboratories and approved to be suitable for 400°C/2h working. These fans will also be certificated according to the new European Community normative for smoke extraction, the EN12101-3.

An added advantage is the use of 2-speed motors as standard by delta/star switch. This means that FC-HT also acts as a normal ventilating unit at low speed, thus allowing the one fan to serve a dual purpose.

Contact: Billy Wright, Irish Fan Distributors. Tel: 051 - 852 404; email:sales@irishfandist.com

Lowara Stainless Steel Electric Pumps

Maximum attention to application requirements and constant research aimed at developing products with a high-performance profiles is the core Lowara philosophy. The result is continuous stream of innovative pumping solutions, one of the latest being the extension of the CEA-CA series of single-impeller and dual-impeller centrifugal electric pumps.

The new CEA-CA version N series with AISI stainless steel hydraulics

joins the established series of AISI 304 stainless steel models to meet the specific requirements of sectors involving aggressive liquids such as acids or waters with high corrosion potential.

Other applications include the jewellery sector and environments where there are spa waters, systems for distributing chlorine in swimming pools and in wine production systems.

The new CEA-CA series includes over 40

models with three-phase and single-phase supply voltages. These are models which cover rated powers from 0.37-3 kW and a broad performance range with deliveries up to 520l/min and heads up to 62 m.

Suitable for pumping liquids with temperatures from -10°C to +110°C, the new pumps are fitted with the most recent Lowara motor with aluminium alloy finned housings.

Environmentally friendly thanks to the use of non-toxic resins, this motor guarantees low noise, easy wiring thanks to its practical terminals

and, protection against humidity with the presence of sealed bearings and single-piece motor housing and rear shield.

Contact: Terry Murphy, Lowara (Ireland). Tel: 01 - 452 0266; email: terry.murphy@itt.com



The new CEA-CA version N series with AISI stainless steel hydraulics

using nature to devise ... et al.: BS News

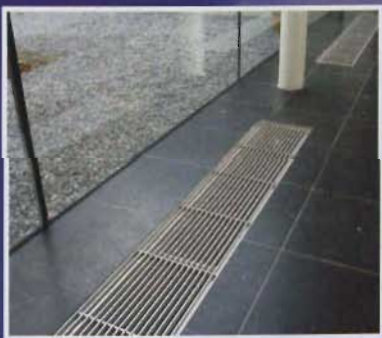
design-led

technology-driven

heating concept solutions



runtal



jaga



vogel



zehnder radiant
ceiling panels

Versatile Agencies has taken the traditional concept of heating and given it form. This is achieved by applying its own extensive knowledge and experience to the product portfolios of cutting-edge, innovative, brand leaders like Jaga, Runtal Zehnder, Sabiana and Vogel.

Heating solutions are custom-designed to facilitate each application. Where visible, the heat emitters contribute to the aesthetics of the setting; however, they can also be unobtrusive to the point of being invisible.



Beechmount Industrial
Estate, Navan, Co Meath

Tel: 046 - 902 9444
Web: www.versatile.ie

Drop Float Design Level Switch

Gems Sensors' LS-7 Series, Type 12, polastic side-mount level switch from Manotherm is designed to eliminate problems associated with liming and calcifying applications. The drop float design keeps critical sensor elements out of the water, thus eliminating liming or mineral deposit problems that can affect other level switches.

This switch is ideal for use on hot water heaters, steam cookers and small boilers, or wherever water evaporation occurs. All models in the series are fully approved vby the relevant authorities for use in potable water.

The LS-7 series is just the latest addition to the Gems Sensors' portfolio which includes liquid level sensors, flow sensors and pressure sensors for use in a broad range of

fluids across the industry. The products feature an ever-expanding selection of sensing technologies including electro-optic, ultrasonic, float type, CVD, thin film, capacitance, hall effect, conductance, micropower impulse radar and remote monitoring products and services.

There are single-point sensors, multi-point sensors and continuous level sensors. Flow sensor configurations are available for use in liquids or gases with flow rates from 50cc/min to 100 GPM. Pressure transducers and transmitters are offered in three proven technologies — sputtered thin film, chemical vapor deposition, and capacitance.

Pressure switches are available in compact OEM models or larger rugged units for process applications.

Contact: Bob Glibert, Robert Gilbert or Noel Walsh, Manotherm.
Tel: 01 - 452 2355;
email: info@manotherm.ie

See The Light 2005



Climate change and record oil prices are two major challenges which require a fundamental rethink of the way we design, construct and operate buildings.

Fortunately, renewable energy offers proven cost-effective alternatives to reduce our greenhouse gas emissions as well as our dependence on expensive and polluting fossil fuels.

See The Light 2005 is the third conference of SEI's Renewable Energy Information Office on the application of renewable energy in buildings. This two-day conference celebrates the emergence of extraordinary standards of energy performance into the mainstream of building construction across Europe and Ireland, as well as the unprecedented level of uptake of renewable energy technologies for building services. The conference will provide a unique forum where you, as delegate, will learn from the expertise and the experience of those leading this movement here and



abroad.

The first day of the conference is dedicated to the overall energy performance of buildings and the application of low-energy and passive house standards. The second day focuses on the implementation of renewable energy systems (solar thermal, wood heating, heat pumps) to service the heating, ventilation and cooling requirements of buildings. The programme puts a particular emphasis on applications in large commercial and public buildings, looking at technical, financial and marketing issues. A study tour will give delegates the opportunity to see at first hand outstanding examples in the Galway area.

Dates are: 21-22 June, 2005; Venue: Ardilaun Hotel, Galway.

CIBSE Annual Golf Outing

The CIBSE Annual Golf Outing will be held this year in the Hermitage Golf Club on Friday 2 September 2005. As always, a full timesheet is anticipated, so early booking is advisable.

Cost for golf and dinner for 4-person team is €750;

cost for golf only is €550 per team.

Booking forms will be issued during July.

Contact: Colin Murphy, Homan O'Brien Associates.
email: colin.murphy@homanobrien.ie

Finheat Appointment

Finheat has appointed Alan Hughes to their team of sales engineers. Alan has a wealth of experience gained over 25 years in the H&V industry and he will undoubtedly bring this to bear on improving still further the quality of customer care services delivered by the company.

Contact: Alan Hughes, Finheat.
Tel: 01 - 623 4222;
Tel: 087 - 910 0515;
email: alan@finheat.com





New Europump Energy-Labeling Scheme for Domestic Circulators

T
O
W
A
R
D
S

S
U
S
T
A
I
N
A
B
I
L
I
T
Y

A new initiative by the European pump manufacturers' trade organisation, Europump, has created an energy-labelling scheme that is expected to entail energy savings worth billions of Euro. Grundfos has been instrumental in promoting the establishment of this labelling standard, along with fellow Europump members Smedegaard (Denmark), Wilo (Germany), and Circulating Pumps (England). Together, the four companies cover over 80% of the European market for circulator pumps.

Established a decade ago, EU energy labelling has enabled consumers to easily see the benefits of an A-class appliance compared to a lower rated one. Now, pump packaging will feature the well-known A-G energy label, complete with an indication of the energy class in which the pump lies.

Most consumers are very aware of the energy consumption of domestic appliances and electric bulbs, their purchasing decisions being greatly influenced by EU rules on energy-labelling. However, very few realise that circulator pumps for water and heating — in both private households and commercial buildings — are likely to consume far more energy than their refrigerators.

Now, however, the energy consumption of circulator pumps is made

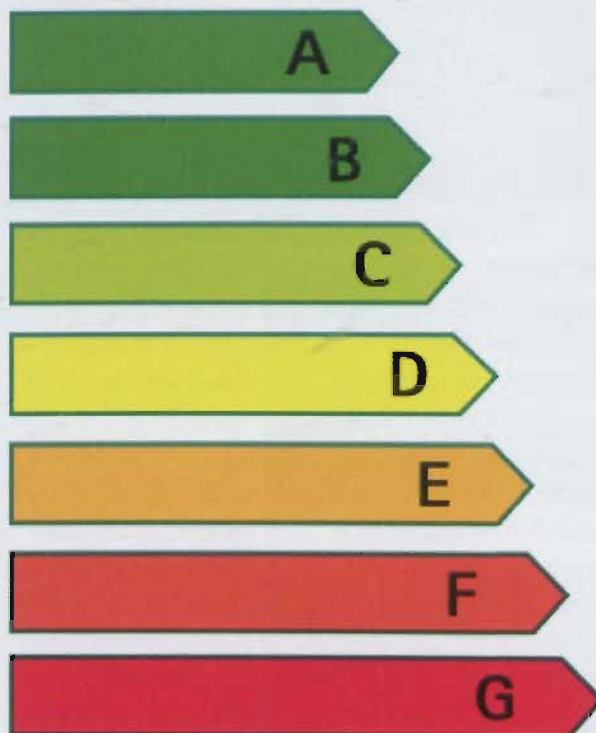
visible with the advent of the new energy-labelling scheme for such products. There are currently 120 million such pumps in Europe, and every year they consume as much energy as all the washing machines in Europe put together.

The labelling is intended to increase public focus on pumps' electrical energy consumption, and to promote development of pumps where electrical energy consumption is even lower, according to Gordon Barry of Grundfos Ireland. "By making this effort to lower energy consumption worldwide, we think ahead toward the future while being responsible in our daily activities. The energy label will help create a shift in the pump market toward innovative products that take responsibility for our energy. With time, this movement will phase out older, more energy-consuming models," he said.

The new energy-labelling scheme will shift focus to pumps that work only when it is necessary and with the required power. Only a few pumps will achieve the optimal category A energy-label. The traditional circulator pump that is installed in thousands of European homes will be placed in category D, because this pump type runs at a fixed speed, 24 hours a day — irrespective of the heat consumption.

The labelling scheme

More Efficient



Less Efficient

Most people are familiar with the energy-labelling symbols (above) to be found on packaging for light bulbs, consumer electronics products and household appliances. Now, following a Europump initiative, the same notation — with appropriate additional product-specific information — will shortly appear on the packaging for all domestic circulators.

applies to the entire EU.

Creating it has not been an easy task as requirements and traditions for heating vary considerably among the European countries. It has taken four years to develop the calculation methods that determine whether a pump is placed in one category or the other.

In response to this initiative Grundfos has developed a series of Category A circulator pumps which are about to be launched in Ireland through Grundfos Ireland. These new pumps are all part of the new Grundfos Alpha Pro pump range head capabilities of 4, 5, and 6 m. They each draw

an average across the range of just 117 kWh annually, representing savings of up to 80% when compared to traditional-type pumps already installed in the marketplace.

Joining this new product line are new models of the established Grundfos Alpha+, UPS, and MAGNA families of circulators. Several of these models also feature "A" energy ratings, even as flow reaches a maximum of 40 m³/hour and a maximum head of 12 m.

Contact: Gordon Barry, Grundfos Ireland.
Tel: 01 - 408 9800;
email: info-
ie@grundfos.com

Modern Building Automation — The Future Is Definitely Now!

B U I L D I N G M A N A G E M E N T S Y S T E M S

Building Energy Management Systems (BEMS) enable building owners and operators to provide comfortable working environments while minimising energy use and costs in commercial, industrial and public service buildings. BEMS systems can improve comfort levels, enable better maintenance and deliver financial savings and environmental benefits. The savings achieved by using a BEMS can be substantial and recur year after year. Following recent increases in fuel and electricity prices, it is now more important than ever to ensure that every BEMS is used effectively, *writes Chris Hughes, SEI.*

The recent Sustainable Energy Ireland "Profiling Energy and CO2 Emissions in the Services Sector" report provides an insight into energy use and emissions in the commercial or services sector. Energy consumption increased by 75% between 1990 and 2003, mirroring the growth of the economy. In 1999 energy costs can be broken down as follows — electricity (82%); heating oil (11%); and natural gas (7%). Lighting, space heating and cooling accounts for the majority of the energy used in buildings

and a BEMS is ideal for managing these costs.

Since they found their first commercial use more than 20 years ago, BEMS technology has vastly improved while the actual costs of installing systems have made BEMS suitable for smaller buildings. A small inexpensive system can be cost-effective in buildings with annual energy bills as low as 10,000. The ongoing success of the public sector energy management bureau, funded by SEI, demonstrates that BEMS systems have the potential to deliver considerable savings, even in smaller buildings.

BEMS can be configured to match any building size and equipment through the use of modern hardware and software technologies. Most systems can be linked easily to the Internet and use web browsers to allow users to view and change building parameters, including temperature settings and time schedules. Time schedules for weekend or evening operation can be added with minimum effort and they can be automatically deleted when no longer required. User-friendly graphics showing major plant and building layouts facilitate easy

diagnosis and resolution of problems.

User training courses, available from BEMS suppliers and installers, should form part of any new installation or upgrade. Regular follow up training, as the level of familiarity with the system grows, will address questions or issues that the BEMS operators may have. New employees require introductory courses to take full advantage of the extensive BEMS features and their configuration. As with any software system, additional features are introduced and upgrades are provided regularly. Therefore BEMS operators should stay in contact with their supplier to keep up to date on current developments and perhaps consider a maintenance agreement.

A well designed and operated BEMS is an effective tool for the operation and maintenance of building plant including air handling units, boilers, chillers and pumps. Engineers can monitor all the equipment from a central location and respond to problems in an efficient manner. For example, as soon as a temperature goes outside prescribed limits, the building maintenance staff are alerted either at a PC,



Waterford City Library, Waterford



Youth Service & Community Centre, Donore Avenue, Dublin



Coppinger Court, Pope's Quay, Cork



Mews House, Raglan Road, Dublin



Northern Exposure, Drumcondra, Dublin 9

All modern buildings demand ever-more sophisticated building management controls to ensure optimum energy efficiencies and systems performance

Modern Building Automation — The Future Is Definitely Now!



via text message, or bleeper. Outside of normal operating hours security can respond to alarms and react accordingly, depending on their importance. The number of hours each item of plant operates can also be tracked and preventative maintenance carried out after a fixed number of running hours.

The PC can store historical data, in addition to real-time information, which the operator can display in detail in a graphical form. For instance, a graph of a room temperature over 24 hours might clearly show that the heating is operating when not required. BEMS have an extensive range of tools that can assist in diagnosing and solving faults with central plant or individual room controls.

One of the major benefits that a BEMS offers is monitoring and targeting. Energy usage can be analysed against other parameters such as outside temperature, floor area, and number of occupants or units of production. Similarly, fuel meters, water meters, and heat meters can be monitored and tracked against preset targets.

BEMS can be programmed to send regular reports via email and to alert the user when targets are exceeded

A range of European and Irish companies manufacture the hardware and software that go into BEMS. Usually systems are bought from local distributors who design the system, including hardware and software, for each particular building. These distributors — sometimes referred to as system houses — provide all the necessary equipment, install, test and commission the system, train the client in its use, provide operation and maintenance manuals, and provide an ongoing maintenance service.

The quality of any BEMS is dependent on the expertise, experience and availability of skilled commissioning engineers. Commissioning engineers should be able to demonstrate up-to-date knowledge of BEMS technology and control techniques. Quality detailed documentation following the commissioning process

should be made available in an operations and maintenance manual. This manual should include detailed drawings showing the connections between the BEMS and the equipment that it controls.

The BEMS has the potential to play an essential role in the efficient and effective operation of buildings. Initially, the system should be designed with close cooperation between BEMS supplier and building operator. This will enable the building operator to have a clear understanding of what the system will deliver and how the control logic will be configured. Clear definition of user requirements, including proposed computer graphics and control strategies, is essential. Following commissioning the BEMS can be used to adjust and refine settings to ensure adequate comfort levels. Regular training for operators and quality system documentation will ensure that the BEMS continues to deliver a comfortable and affordable working environment.



The Palm House Complex, Botanic Gardens, Glasnevin, Dublin



Apartments at Shrewsbury Road, Cabinteely, Co Dublin



Baldoye Library & Local Area Office



Roches Stores, Dublin



Baggidy A Housing, Clondalkin, Dublin



IMI, New Conference Centre & Bedroom Facility, Dublin

Cylon — A Truly Web-Enabled Solution

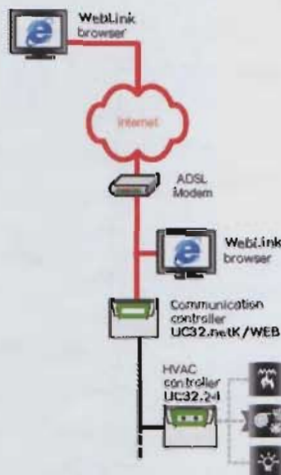
The growth and development of building management systems has been quite dramatic in recent years. Driven by the demand for greater comfort levels, more flexible control mechanisms and greater energy efficiencies, BMS developers have devised innovative solutions using very advanced technologies.

However, with the dramatic increases in energy prices in the last 12 months, and the forecasts for future oil price rises, there is a push to ensure BMS systems are operating effectively. Up until now monitoring and control was limited to a small number of users with specialised dedicated PCs, while remote monitoring was relatively difficult and expensive.

Cylon Controls has now solved this problem. Always to the forefront in this particular industry sector, its new web-based UnitronUC32 controls are unique in their level of flexibility. Virtually all other technology sectors have already adopted web-based solutions and Cylon saw no reason why BMS should be any different.

The use of web technology means that a BMS can be monitored or controlled from existing web browsers, without the need for special client software installation. Existing fixed or wireless internet connections are used, removing the need for dedicated network set up. This greatly simplifies deployment and dramatically reduces ongoing support issues.

CYLON
Embedded
WebLink



UNITRON UC32
Building Management System



The use of a web browser interface also provides maximum flexibility. It minimises the cost of design changes, even at a late stage in commissioning. Moreover, while clients' needs will undoubtedly change and plant and equipment will be updated, the same control solution will handle all requirements.

With Cylon UnitronUC32 management is improved by the increased monitoring capability over geographically distributed sites. Small sites that were previously uneconomical to manage can now be controlled efficiently. Local monitoring can be deskilled to a very simple and familiar interface with intuitive graphics and animations.

The use of web technologies allows any number of users to be supported, from the smallest remote sites to the most demanding of

large installations. New web pages can be easily created while web-enabled HVAC control and monitoring can be presented to users inside of other web applications or information services.

There are currently thousands of small sites throughout the country operating on a control strategy that is years old and no longer meeting the user needs for comfort or energy efficiency. Schools are an excellent example, especially given the large numbers and age of some of the building stock. What makes them even more interesting is that the vast majority are already connected to the internet.

The Cylon UnitronUC32 is also future-proof as web-based technologies such as HTML and XML are open and standards-based. Once installed there is a consistent interface for end users, irrespective of the actual system



architecture.

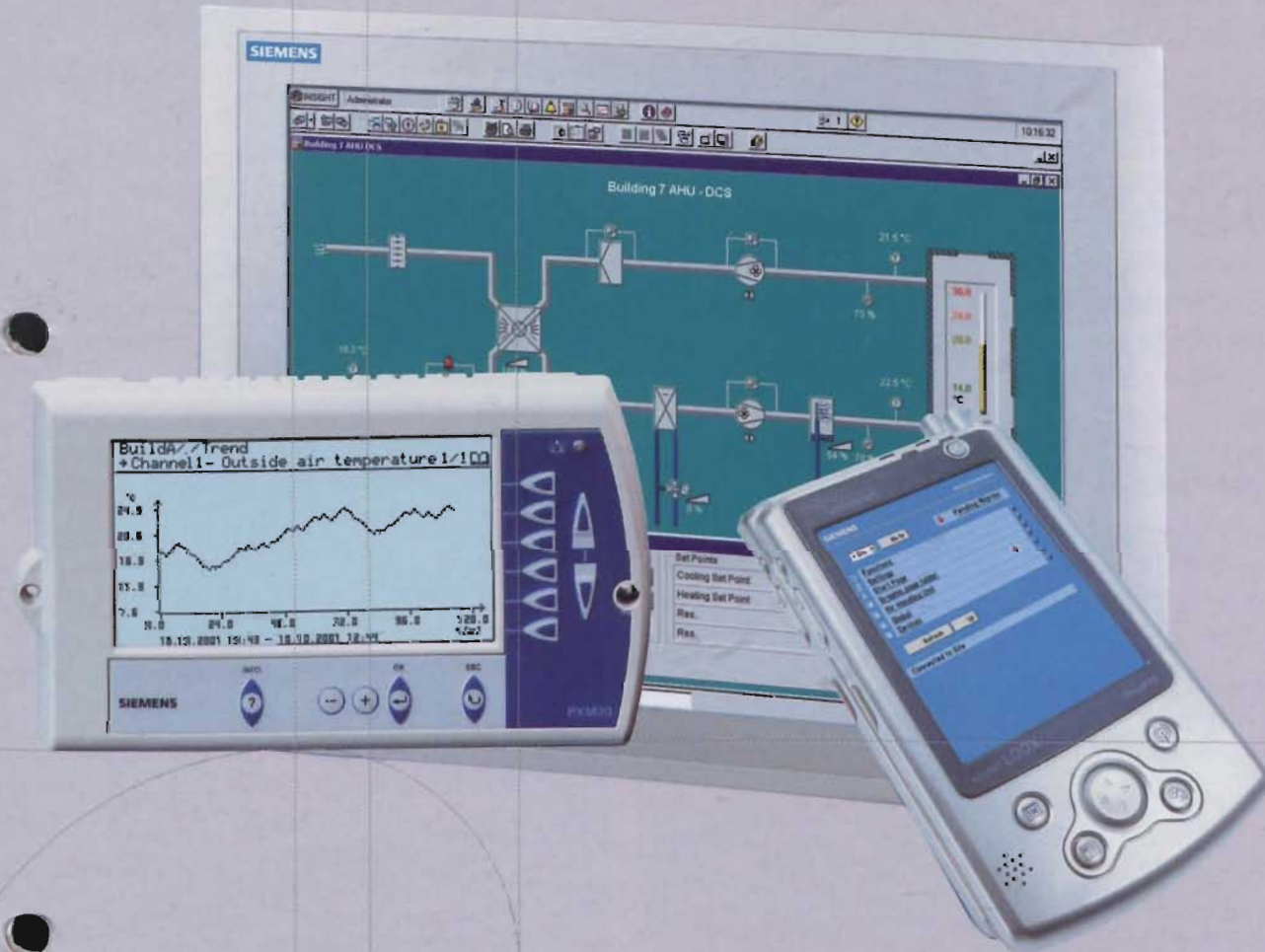
In conclusion, the fully web-enabled UnitronUC32 range allows the BMS to be monitored and adjusted using a familiar web browser environment which can be over the internet, through a local intranet, or on a PC directly connected to Unitron controllers. The main new development is that there is no special software required on end users PCs. In the case of small sites there is no requirement for dedicated PCs as all the new communication controllers now have an embedded web server. Once the web system has been set up for a Unitron BMS site, any PC with Internet Explorer web browser can connect (depending on security restrictions) and view or change points on the site.

What sets Cylon UnitronUC32 apart from other BMS systems solutions is that, despite being ultra-sophisticated and complex in concept, it is flexible and simple to install, manage and operate.

Contact: Cylon Controls.
Tel: 01 - 245 0500;
email: info@cylon.com;
www.cylon.com

SIEMENS

Building Technologies



Efficient buildings – powered by Desigo™

With its modular design DESIGO™ PX, the automation system for HVAC and building services, can be tailored to your individual preferences and needs. This is just one of the offerings that makes Siemens the ultimate solution for fire safety, security, access control and HVAC BMS applications.

For further information please contact:-

BMS - Sirus Engineering, 13 The Westway Centre, Ballymount Avenue, Dublin 12. Tel: +353 1 460 2600 Fax: +353 1 450 7968

CMC House, Unit 4, Eastgate Way, Eastgate, Cork.

Tel: +353 21 315552 Fax: +353 21 35556

Fire Safety - Siemens Building Technologies, Avonberg Industrial Estate, Longmile Road, Dublin 12. Tel: +353 1 450 8920 Fax: +353 1 450 8862.

Safeguard Systems — Taking Smoke & Fire Control Innovation to the World

B
U
I
L
D
I
N
G
M
A
N
A
G
E
M
E
N
T
S
Y
S
T
E
M
S

Safeguard Systems PC-based intelligent control makes Safeguard's smoke and fire damper system one of the smartest and safest on the market. Founded in 1994, Safeguard Systems has grown to become the market leader in dampers and damper control systems in Ireland. "We at Safeguard have a philosophy of delivering unsurpassed customer service and providing the customer with the best solution. This is not a vague aspiration, we challenge ourselves to deliver that promise every day and we believe that this is the key to our success, both in Ireland and abroad", says Conor Walsh, Sales & Marketing Director.

Safeguard Systems currently employs 13 people who work as a cohesive team to design, develop and market an innovative PC-based control system (Safeguard V3) that stops the spread of fire and smoke through the ducted ventilation systems of buildings. Typical applications are hospitals, offices, airports and shopping centres etc. This innovative product is the only one of its type anywhere in the world and offers capacity and flexibility unimaginable heretofore.

According to Safeguard Systems, the main



Safeguard's V3 smoke/fire damper control panel

benefits of its system are:

- Protection of life and building fabric;
- System flexible to accommodate future change;
- Practically unlimited system capacity;
- Worldwide approval based on LonWorks operating system;
- User friendly Windows platform;
- Ensures regular damper testing.

Safeguard Systems now exports this unique product through appointed distributors to the United Kingdom, Germany, Luxembourg, Scandinavia and Malta. The company's reference list includes some of the most prestigious projects in each territory. These include:—

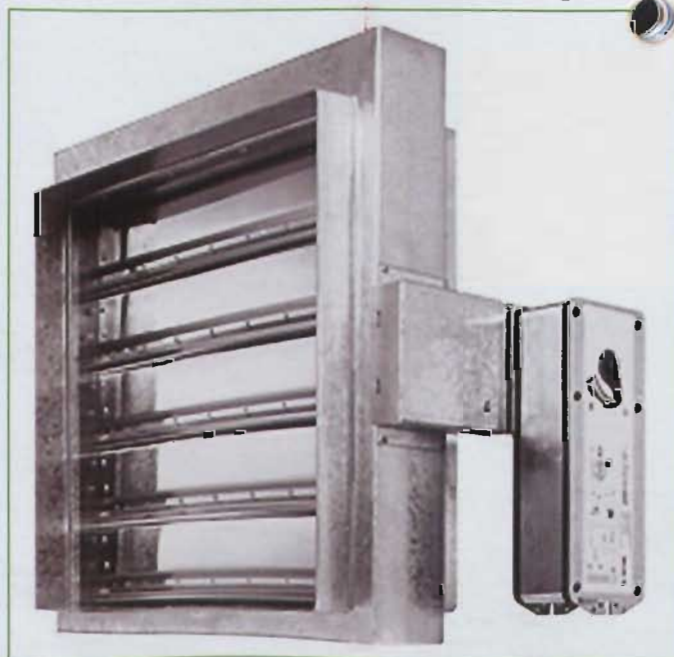
- St James' Hospital,

- Dublin;
- Air Traffic Control, Dublin;
- James Connolly Memorial Hospital, Dublin;
- Trinity College, Dublin;
- The British Museum, London;

- New Royal Aberdeen Children's Hospital, Aberdeen;
- Queen Elizabeth Hospital, Manchester;
- Heartlands Hospital, Birmingham;
- Stansted Airport, London;
- Liverpool University, Liverpool;
- Kings Library, London;
- Dexia Bill, Luxembourg;
- High School, Sweden.

Within the UK market the V3 system is branded as the Actionpac System and also holds the position of market leader. Together with Safeguard's appointed distributors across mainland Europe, the target is to achieve market domination in each territory within three years.

Contact: Conor Walsh, Safeguard Systems.
Tel: 01 - 276 1600;
email: info@safeguard.ie



Fire damper available from Safeguard

**The ONLY front fixing
24 hour, 7 day, 5/2 day
programmer with
2 or 3 on-offs
per day, that fits
more backplates
than any other.**



MEP 2c Dual Channel Programmer



MEP 1c Single Channel Programmer



MPRT Programmable Room Thermostat



**Find out more
in here.**



Unique Myson MEP 2c programmer complete with decorating cover and tile support backplate. Fully compatible with Part L of the Building Regulations. Read all about the patent-pending Myson MEP programmers and a whole range of other fresh ideas.

**YET ANOTHER FRESH IDEA
FROM MYSON CONTROLS**

Potterton Myson (Irl) Ltd

Belgard Road, Tallaght, Dublin 24
Tel: 01 - 459 0870 Fax: 01 - 459 0880
email: post@potterton-myson.ie
www.myson.ie

Myson Controls — Highly Sophisticated But Simple To Operate

Today's electronic controls should be easy to understand and operate. They should also be straightforward to install and offer a full range of control for today's highly-efficient heating systems. Myson's new range of controls offers all of these, including unique and technically-innovative features designed to ensure compliance with existing, and impending, building regulations. A typical example is the new MPRT programmable room thermostat. Benefits include:—

- Easy-to-use slimline multi-functional thermostat;
- Seven-day programming;
- Three temperature settings — comfort, economy (set back) and frost;
- Four programmes (three preset, one adjustable) with manual override;
- Clear, accurate LCD display;
- Vacation delay setting from one hour to 50 days;
- Installer-optional adjustments



Myson's new range of electronic controls from Potterton Myson

(differential, calibration, heat or cool, frost setting, 1 minute pump on function, high and low limit adjustment settings, password protection);

- No neutral, two wire connection.

Further extending the versatility of Myson's controls range is the Myson Powerextra motorised valve which has been designed with complete reliability and compatibility in mind. The reliability comes from years of developments in design, production, the quality of components, and the tight quality control imposed at the factory during the manufacturing process.

The entire range of

MPEs incorporate a market-leading 6-Watt Class 'F' motor, with high torque to ensure start-up after prolonged shut down. The valve shoes are manufactured using mica-filled PTFE to ensure a smooth sealing operation. The thread connection, dimensions and wiring are interchangeable with the majority of installed valves (including Honeywell). Indeed, a product interchange wiring guide covering all the major manufacturers' products is included with every valve.

Complementing the foregoing is the new PPV Range, which is also designated the "plastic solution". The Myson PPV range of both thermostatic and manual radiator valves was designed following consultation with heating engineers, national house builders and plastic pipe manufacturers. The result is a versatile and attractive range of valves — including both pushfit and compression connections — specifically for use on domestic heating systems where plastic pipe has been specified.

Benefits of the Myson PPV range include:—

- Pipework can be neatly installed directly into the dry lining, through the wall, or even behind the skirting;
- It removes the need for unsightly plastic elbows beneath the radiator valve;
- Plastic pipework behind the skirting makes carpet-fitting easier and eliminates the risk of damage during vacuuming;

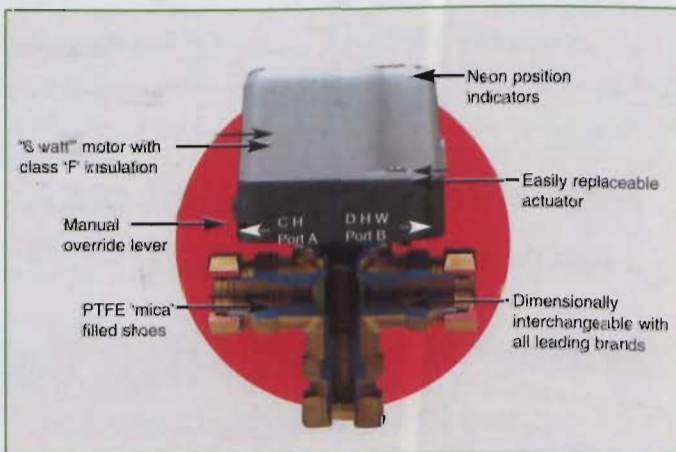


The new Myson plastic solution PPV (plastic pipe valve) range of valves — now pipework can be neatly installed directly into the dry lining, through the wall, or even behind the skirting



- One range of valves fits all manufacturers' BS 10mm and 15mm tube, plastic or copper;
- Up, down, back, front, left, right, vertical, horizontal, pushfit or compression — PPV covers them all.

Contact: Potterton Myson (Irl).
Tel: 01 - 459 0870;
email: post@potterton-myson.ie



Myson Powerextra motorised valve from Potterton Myson (Irl)

Belimo. A complete range of products from one source.



More performance – more value.
www.safegard.ie

5
year warranty
SWISS QUALITY

A complete range of worldwide leading actuator solutions and valves in the field of heating, ventilation and air conditioning systems from one source. Swiss quality (with a **5 year warranty**), short delivery times and competent technical support create genuine added value.

Profit from an unbeatable product range – choose Belimo.

SAFEGARD ARE ALSO THE APPOINTED IRISH DISTRIBUTORS FOR:



Safeguard Systems

THE DAMPER SPECIALIST COMPANY

SOLE IRISH DISTRIBUTORS FOR

BELIMO

Safeguard Systems Ltd., Systems House, Unit 34, Southern Cross Business Park, Bray, Co. Wicklow

T: +353 1 858 8800 F: +353 1 276 611 E: info@safeguard.ie W: www.safeguard.ie

Published by ARROW@TU Dublin, 2005



Efficient Buildings — Powered by DESIGO™

B
U
I
L
D
I
N
G
M
A
N
A
G
E
M
E
N
T
S
Y
S
T
E
M
S

Flexibility, scalability, simplicity and openness—these are the characteristic features of the Siemens DESIGO™ building management and control system designed for the control and supervision of HVAC and other building services plant.

The system incorporates the following key features:—

- Scalable from small to large;
- Freely-programmable system controllers in compact or modular versions;
- Proven applications;
- Integrated and open total solutions for individual rooms;
- User-friendly and innovative operation — onsite, in the room, or via the web;
- Intuitive network display panel;
- Powerful graphical interface;
- Professional software tools for engineering and commissioning;
- Maximise existing investment by using IT networks;
- Future-orientated communication based on BACnet and LONMARK standards;
- Open at all levels to allow integration of third-party devices;
- Energy monitoring and targeting.

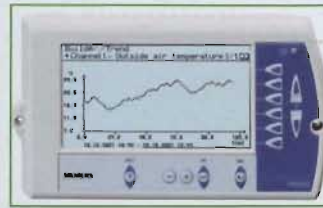
In multi-tenanted buildings served by a common heating or cooling source heatmeters are essential in measuring, monitoring and controlling the amount of energy used. The new heatmeters from Siemens Building Technologies are a cost-effective and reliable way to meet this need. They are designed for both heating and cooling applications, and the range includes single-

jet impeller and ultrasonic models with units to cover flow rates from 0.6 to 60m³/h.

Siemens' heatmeters support remote reading of the collected data — over standard two-wire M-bus networks or using radio communications — increasing efficiency for the meter reader, who does not have to disturb individual tenants to take readings.

Meters can also be networked using standard M-Bus communications using a 2-wire bus. They can then be connected back to a central unit. Data can be read back directly at the central unit or remotely via user-friendly readout software. It is also possible to integrate M-Bus devices into building management systems such as the DESIGO™ system.

Also new from Siemens Building Technologies is SED2, the first variable speed drive to be designed and built by a building management controls company. A combination of over 100 years' industry experience and the latest technology have been used to achieve a



The DESIGO™ building management and control system designed for the control and supervision of HVAC and other building services plant

variable speed drive designed specifically for HVAC applications.

The SED2 incorporates a universal keypad throughout the 0.37 kW to 90 kW range, enabling fast and easy commissioning and simple operation for the user. Two keypads are available — Basic Operator Panel (BOP) supplied as standard; and Advanced Operator Panel (AOP) with four-line clear text display. The AOP keypad can store, upload and download 10 complete parameter sets, has an integrated seven-day timer function and provides hand/off/auto control.

Meanwhile, the intelligent IP20 and IP54 designs allow side-by-side mounting within panel and control room environments. The complete range

incorporates an enhanced EMC low-noise Class B filter making it suitable for all types of buildings. This unique design reduces harmonic interference.

Conceived in the era of energy conservation and with the advent of the climate change levy, the SED2 incorporates unique functionality that optimises the energy saving capacity of centrifugal fan and pump applications, helping to reduce operating costs for the customer. In addition to the savings that can be made by controlling the system, unique design features ensure that the SED2 reduces motor and VSD energy losses.

Compatible with all commonly-used induction motors, the SED2 range has built-in PID for fast and accurate pressure control, plus pump control for multiple staging/cascading where constant pressure or constant flow is required. Its comprehensive diagnostics and monitoring ensures that faults are rapidly addressed and down-time is kept to a minimum.

The SED2 will detect and display 30 error codes from V-belt failure to mains phase loss and these are displayed on the keypad. It has been designed with the user in mind and the innovative solutions for HVAC applications ensures that SED2 customers will benefit from maximum flexibility with the minimum of the associated engineering, programming and operating costs.

Contact: Martin Keogh, Sirius Engineering Systems.
Tel: 01 - 460 2600;
email: martin.keogh@sirus.ie



The new Heatmeters from Siemens Building Technologies are a cost-effective and reliable way to measure energy consumed. They are designed for both heating and cooling applications.

Integrate

Reduced Operating Costs

Honeywell Enterprise Buildings Integrator

Productivity

Efficiency

Honeywell Enterprise Buildings Integrator

Safety and Security

Building Automation Solution



Honeywell provides innovative and flexible solutions to create efficient, safe, and comfortable environments; helping business and industry improve productivity and profitability. We can help you take building data out of the plantroom and into the boardroom, linking in with your financial systems to enable you to truly see operational impact on your bottom line.

Honeywell Building Solutions: Using our global expertise to boost the performance of your buildings

Honeywell

BUILDING MANAGEMENT...FIRE DETECTION & ALARM...DIGITAL CCTV...INTRUDER ALARM...ACCESS CONTROL & ASSET MANAGEMENT SYSTEMS
The Honeywell Enterprise Buildings Integrator™ is a revolutionary suite of integrated facility management applications. It's designed to give you complete control of your buildings, while offering unrivalled integration with your business processes. Including Building, LifeSafety and Security Management applications, Honeywell EBI truly employs the benefits of information management to take your facility's productivity to another level. For more information contact **Gerry Pembroke** on: 01 456 5944 or e-mail: gerry.pembroke@honeywell.com



Honeywell Six-Stage Approach To Perfect Building Management

BUILDING MANAGEMENT SYSTEMS

Energy savings initiatives can turn into a series of short-term plant replacement projects that are sold on the promise of a cost saving. For Honeywell Building Solutions — a leading provider of mechanical and electrical, HVAC controls, security, fire, building management and network services — this is the wrong approach. Long-term measurements are needed to validate both the benefit of energy saving initiatives that have been put in place, and to identify others that may not be obvious.

Honeywell believes that the key to successful energy improvement is explicit understanding of a client's existing control regime and plant performance.

This proven approach to energy usage is the result of years of experience in the development of leading environmental building control solutions and services — all of them fundamentally linked to the measurement and optimisation of demand-side energy performance.

Honeywell follows a simple six-step approach, without committing the customer to move from one stage to the next.

1 — A Honeywell technician comes to carry out an energy screening of existing



Honeywell's six-stage approach involves exacting measurement and analysis to ensure the best possible solution is devised.

controls, heating, cooling and ventilation plant and lighting. This provides immediate identification of the greatest inefficiencies and the scope for potential savings;

2 — Detailed measurements and data collection are made of the areas identified in stage one. This allows baseline and benchmarking reports to be made;

3 — Honeywell provides a detailed report from the data from stage two. This would include recommendations of where improvements can be made. Through the use of specially-developed calculation tools a full feasibility study, including payback

and disruption, is also provided;

4 — If agreed, skilled Honeywell technicians implement the changes;

5 — This entails full re-measurement of the areas under scrutiny to prove the cost savings;

6 — The results and analysis of this second phase of measurement are then reported to the customer.

Honeywell advocates that the process of screen, measure, report, implement, re-measure and report gives customers the confidence to invest in energy saving measures that deliver tangible benefits. The ability to quickly pinpoint the areas of need ensures efficient deployment of resources. Measuring and reporting on those key areas provides both the customer and Honeywell with clarity and an assurance that any projected savings are from agreed benchmarks rather pre-determined promises.

Re-measuring and reporting the savings gives the client the information necessary to quantify the return on investment.

Contact: Gerry Pembroke, Honeywell Building Solutions.
Tel: 01 - 456 5944;
email: gerry.pembroke@honeywell.com



This proven approach to energy usage is the result of years of experience in the development of leading environmental building control solutions and services

Another Side of ...



Rise at 4.30am, Muck Out & Ride 160km? ... Not Likely!!!

Ciaron King of the Ventac Group is known the length and breadth of the industry as an energetic, driven individual, all the time on the go. However, most will still be surprised to learn the extent of his daily routine when he is not jetting around the place talking to suppliers and customers.

Always a keen outdoor enthusiast, he has been into boating, vintage car rallying, shooting and horse riding. In recent years he has concentrated on horse riding, participating in various showjumping events around the country. However, after a short spell he also found this activity tame.

His average routine when in Ireland is quite staggering. Rising at 4.30am to muck out the stables and exercise his horse, he then does a full day's work before returning home to repeat the process. However, putting all that effort in to travel for maybe two/three hours at the weekend to compete in a showjumping event which involved mere minutes of actual competition soon lost its attraction.

So, he has recently turned to endurance riding. The daily routine of early rising and exercise remains the same but now, instead of a quick trot over some fences, he is aiming for the ultimate endurance challenge ... a trek of 160km on horseback.

Believe it or not this, according to Ciaron at least, is a growing sport in Ireland. It requires a great deal of training and fitness — on the part of both horse and rider — and involves gradual progression via two runs of 25km, two runs of 60km, and two runs of 80km before you are allowed to undertake the ultimate challenge.

As you would expect, it is an extremely-regulated sport with



paying a fee to cover the cost of vets' fees and drug-testing costs. There is no prize money or trophies, personal satisfaction and the odd rosette being the reward.

The pleasure for Ciaron in endurance riding is the challenge, the excitement, and the enjoyment of being outdoors. "You are in the fresh air and come across deer, birds and other wildlife. Apart from appreciating them, you have also got to be on your guard. When an animal or bird suddenly appears out of the bush it can startle the horse. That said, one of the biggest frights I got in the middle of a wooded area was the local rugby team suddenly bearing down on us while out on a training run!"

As yet, Ciaron is at stage two and about to undertake the second formal phase. However, he anticipates tackling the 160km stage within 18 months. Rather you than me Ciaron!

vets on hand at set points on the route to monitor the horses health. They are empowered to stop the event at any stage, and have done so even with the finish in site. Participants are also obliged to have their own support crews who station themselves at various points to provide drinking water and slosh buckets for the horses. On average, a 160km trek takes approximately 12 hours — 10 hours riding and two for pit stops and vet checks. The routes are marked out with a ribbon trail while the riders also have maps.

The entire sport is regulated by the Irish Long Distance Riding Association (ILDA) with members and event participants

Ciaron King

New Mindset & Culture Required of Services Engineers

C
I
B
S
E

N
E
W
S

In accepting the position of CIBSE Chairman for the coming year Kevin Kelly complimented those who have made the Institute the powerful force it is today but cautioned that, looking to the future, a new mindset and culture is required if services engineers are to play the role they should in developing the role of the profession, and sustainable building as a whole, over the coming years. Brief extracts of his address are as follows:—

"It is a great honour to be elected Chairman of the Chartered Institution of Building Services Engineers for the Republic of Ireland and a great challenge for me to attempt to follow a long list of esteemed engineers in this role. I would like to pay particular tribute to Michael McNerney and Kevin Tracey, my immediate predecessors, in this respect, and also to mention Greg Traynor and Brian Sterling, both former



Kevin Tracey with Declan Monaghan, Keith Sunderland, Seamus Homan, Alan Duggan, Brian Beattie, Kevin Kelly, new Chairman, CIBSE Republic of Ireland Branch, Brian Geraghty, Michael McNerney, Gerard Keating, Kevin O'Connell, and Colin Murphy

chairmen who still make a huge input to the work of the committee. No organisation can operate as successfully as CIBSE in Ireland has without a dedicated and talented committee working tirelessly behind the scene. Margaret Dolan has decided to take a well-earned rest from secretary this year and Albert Byrne is also reducing his workload, after significant input. I must say we had a very successful committee last year and I look forward to working with the new committee in the year ahead.

"The new committee looks very

strong, comprising as it does a mix of experience and new blood. In particular I look forward to working with the incoming vice-chairman Brian Geraghty, new secretary Gerard Keating, and our treasurer Alan Duggan. Michael McNerney is to continue his good work ensuring that the CIBSE profile is raised outside Dublin. Lectures will be presented in both Cork and Limerick once again this year.

"The challenges that face us as building services engineers in Ireland in the early years of the 21st century are formidable. The knowledge economy

is with us and this has resulted in much change to the Irish economy and society, as well as the engineering profession.

"Until fairly recently we worked in hierarchical and bureaucratic organisations. We did not have to worry too much about innovation and higher education because much of our work was repetitive and any innovation required could be provided by somebody up the line. This is no longer the case. Engineers nowadays must be innovative and work as part of a team.

"For companies in the building services sector who are at the

New Mindset & Culture Required of Services Engineers



Kevin Kelly, new Chairman CIBSE Republic of Ireland Branch, with Michael McNerney

cutting edge of sustainable design, opportunities will open for co-operation in research activities with the higher education sector. Partnership research projects must be pursued.

"For staff working in these companies CPD courses and formal student-centred programmes

must take account of the way mature students like to learn, as well as their prior formal learning and their experiential learning, will provide opportunities for people in the industry to upgrade their qualifications. Mature students bring questions from the workplace that allow them apply their learning at a high level and

achieve learning outcomes more quickly. They also help highlight research opportunities.

"Sustainable engineering requires ingenuity, innovation and high levels of education. Evidence in the form of good quality research will allow a more successful approach to sustainable design and sustained change in our industry. This will result in increasing opportunity for engineers to pursue good quality research through higher degrees. Opportunities for self-advancement and advancement of our profession will result.

"Some obvious research areas in

sustainable engineering that immediately spring to my mind are:

- Renewable resources, particularly photovoltaics and wind;
- Combined heat and power;
- Building management systems and controls.

"Perhaps the biggest potential for sustainable design is in building fabric and structure design. This latter point may require a whole new mindset and culture in the way things are done. A new building services design paradigm, where the services design begins at the conceptual design stage of the building, may be necessary. Close association with the architect is essential from a very early stage.

"It is my intention, in association with our new committee and my colleagues in DIT, as well as the leading companies in this area in Ireland, to organise a one-day symposium early in 2006 to look at best

practice in this regard in Ireland and the UK.

"We also intend to run a full programme of HVAC and electrical events, many of which will feature sustainable design.

"I would like to hear from companies about their experiences at the cutting edge of design in Ireland so that we can spread the news of research findings in Ireland and develop the industry's research profile. The symposium will help provide a focus for this.

"In summary, in my position as Chairman, I would like to form a tripartite of CIBSE, HE and industry to improve our levels of research in building services in Ireland, combined with offering higher degree opportunities to engineering staff in the building services industry. In this way I hope we can continue on the good work of previous years."



Plumb Lines

Heard it on the grapevine ...



LEGIONELLA CASE RETRIAL

The case of Gillian Beckingham, the UK council architect accused of the manslaughter of seven people who contracted legionella, is to be retried. Although found guilty of breaching health and safety laws last month, the jury failed to reach verdicts on the manslaughter counts and so a retrial was ordered.

25 YEARS AGO TODAY



Who would have forecast back in April 1980 when we featured Liam Lawlor that he would achieve such notoriety over the coming years? He was already a sitting TD at the time but was also Managing Director of Hall Thermotank Ireland, a company specialising in commercial and industrial refrigeration. Despite being market leader at the time Liam obviously saw that politics was a more efficient route to riches!

GET WELL PETER

Best wishes to Peter Fagan of Finheat who was very seriously injured in a recent motor accident. I, along with all your colleagues and friends in the industry, wish you a speedy and full recovery.

EASY PISA!

The city of Pisa in Italy is set to get another — albeit make-believe — leaning tower. More than 600 years after the original was constructed, city officials have reportedly approved construction of a modern office building about three miles southeast of the original that will simulate a tilt with a trick of lighting. While purists have denounced the project, Pisa's urban planners say it will attract even more tourists to the city.

AAD INDUSTRY

At last, the building services sector has been clinically defined as a condition. Don't believe me? Well, AAD — adrenalin addiction disorder — is a condition affecting people who are "jumpy, irritable, and expect everything to be done yesterday but fail to allow staff enough time to do a proper job". Sounds like your average building services project to me.

LG TO SUPPORT LIVERPOOL



The news that LG has become the official Liverpool FC telecoms sponsor has Liverpool fans within the industry gleefully rubbing their hands. However, word of warning. Austin McDermott of Core Air Conditioning (who distribute LG ac products throughout Ireland) is not really a soccer fan, let alone a Liverpool supporter. He is much more likely to organise a fact-finding trip to one of LG's European manufacturing facilities than a visit to the hallowed Anfield ground.

RUSK AUTOMATION



Morgan Rusk has joined Mitsubishi Electric Ireland as Technical Sales Executive with responsibility for its industrial automation products. He will work with Mitsubishi Electric distributors and consultants in developing and maintaining relationships with Mitsubishi Electric's end users.

SPOT THE DIFFERENCE WINNER

Last month's Sanyo/BSNews spot-the-difference winner was Ray Staunton of RSEL in Ennis, Co Clare. Happy listening Ray. See page xx for this month's competition.

INSTALLERS UNITE
Subsequent to the REGII initiative in Dublin and the efforts of similar domestic installer representative bodies throughout the country, plans are now at an advanced stage for a national Federation of registered installers. The momentum is at an all-time high, the advantage being that regional representative bodies are already in place.

economical ecological ecolution: high performance solution



ECOLUTION is the new generation of split, multi-split and VRF inverter systems from Mitsubishi Heavy Industries Ltd.

Packed with new features, our intelligent design ensures high performance combined with ultra energy efficiency. All models are now quieter, smaller and lighter, allowing a simple and neat installation for applications from a single room to an entire building.

ECOLUTION - high performance solution.

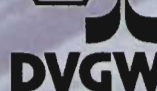


Complete Solutions

Building Services News, Vol. 44, Iss. 5 [2005], Art. 1

We offer a complete range of high-quality, competitively priced products for pressure, temperature and level measurement.

- Our range does not only cover the delivery of individual sensors, but includes suitable power supplies and measurement display units.
- Upon request, we do the entire engineering for you, all the way to the production of the finished control systems.
- National and international approvals and certificates assure the highest level of quality.
- A wide selection of materials (e.g. stainless steel 1.4571/1.4435/1.4404, Monel, Hastelloy, Platinum, Titanium, PFA/PTFE coating) and process connections enable perfect adaptation to the process.
- AFRISO measuring devices cover the following ranges:
Pressure: from 0/4 mbar to 0/4.000 bar
Temperature: from -80°C to +600°C
Level: from 0/60 cm to 0/100 m



Pressure Gauges



Digital Pressure Gauges



Pressure Transducers



Diaphragm Seals



Manotherm Limited

4 Walkinstown Road, Dublin 12.

Tel: 01 - 452 2355/452 2229; Fax: 01 - 451 6919

email: info@manotherm.ie

Measurement Technology From Manotherm